Rapid, in-situ remediation & closure of groundwater sites impacted with fuels, oils, solvents, creosote, coal ash, or tars

www.ecovacservices.com

GREEN SHEET

Environment/Brown Fields/ Sustainment/Energy
Conferences, Newsletters, Reports, Training, Contracts & Professional Organizations

November-December, 2016

New Entries Highlighted in Yellow

2016 Environmental/Brownfields/Sustainment/Energy Conferences


• Dec 10-15, 2016, Restore America’s Estuaries, **8th National Summit on Coastal & Estuarine Restoration**, New Orleans, LA, [https://www.estuaries.org/](https://www.estuaries.org/)


• Dec 19-21, 2016, CATEE, Clean Air Through Energy Efficiency Conference, San Antonio, TX, [http://catee.tamu.edu/home](http://catee.tamu.edu/home)

### 2017 Conferences


• Jan 9-12, 2017, Battelle, **9th International Conference on Remediation of Contaminated Sediments**, New Orleans, LA, [http://www.battelle.org/media/conferences/sedimentscon](http://www.battelle.org/media/conferences/sedimentscon)


• Feb 22-25, 2017, WWETT, Water & Wastewater Equipment Treatment & Transport, **Annual Conference & Expo**, Indianapolis, IN, [https://wwettshow.com/Attendee/ShowInfo](https://wwettshow.com/Attendee/ShowInfo)


• May 7-12, 2017, NJWEA, New Jersey Water Environment Association, **102nd Annual Conference & Exhibition**, Atlantic City NJ, [http://www.njwea.org/events/](http://www.njwea.org/events/)

• May 9-11, 2017, GRWA, Georgia Rural Water Association, **GRWA Spring Conference**, Jekyll Island, GA, [http://www.grwa.org/events.cfm?id=2040](http://www.grwa.org/events.cfm?id=2040)


• May 16-18, 2017, GRWA, Georgia Rural Water Association, **GRWA Spring Conference**, Jekyll Island, GA, [http://www.grwa.org/events.cfm?id=2040](http://www.grwa.org/events.cfm?id=2040)


Other Conferences and Events


• Other US Federal conferences & events. See https://www.fedcenter.gov/calendar/conferences/ and also https://www.govevents.com/weekly-newsletter-v2/vendor/242

• Other Energy Conferences, http://www.eventsinamerica.com/trade-shows/business/energy/date/100000

Environmental Training


• NGWA, National Groundwater Association. Conferences, Workshops, Courses, and Webinars. http://portal.criticalimpact.com/vm2/0b946905bbf4410e25576/10db80a0750ac25b16676d10e8679c8a


• Webinars. See newsletters below for numerous more training courses and on-line webinars.

Environmental Contracts & Grants

Environmental Newsletters

- ESTCP/SERDP, Solicitations & Funding Opportunities, [https://serdp-estcp.org/Funding-Opportunities/ESTCP-Solicitations](https://serdp-estcp.org/Funding-Opportunities/ESTCP-Solicitations)
- FedCenter.gov, Provides sources and procedures for a variety of environmental grants. [https://www.fedcenter.gov/opportunities/grants/#cleanup](https://www.fedcenter.gov/opportunities/grants/#cleanup)

Environmental Reports/Publications/Guidance

- DoD Natural Resources Program, Enabling the Mission, Defending the Resources, [http://www.dodnaturalresources.net/Index.html](http://www.dodnaturalresources.net/Index.html)
- EPA. 2016 Wastewater Report, Survey showing that $271 billion is needed to maintain and improve the nation’s wastewater infrastructure, [http://yosemite.epa.gov/opa/admpress.nsf/bd4379b92ceceeeac8525735900400c27/e418f2bd321cad9b85257f390052f5be?OpenDocument](http://yosemite.epa.gov/opa/admpress.nsf/bd4379b92ceceeeac8525735900400c27/e418f2bd321cad9b85257f390052f5be?OpenDocument)
- EPA News Releases, [http://www.epa.gov/newsroom](http://www.epa.gov/newsroom)
- SSRC, Space & Science Research Center, Director John Casey publishes book, Dark Winter, explaining alternate theory for Climate Change, [http://www.spaceandscience.net/index.html](http://www.spaceandscience.net/index.html)

Environmental Newsletters

- Army Regional Environmental and Energy Office (REEO), Overview at [http://www.asaie.army.mil/Public/ESOH/REEO/](http://www.asaie.army.mil/Public/ESOH/REEO/). Newsletter for EPA Regions 1, 2, 3 and 5, contact Leanne Dickens at Leanne.L.dickens2@usace.army.mil; Region 4, David Eady at david.s.eady@usace.army.mil; Regions 6 & 7, Jim Mayer at james.a.mayer2@usace.army.mil; Regions 8, 9 & 10, Nancy Reese at nancy.l.reese2@usace.army.mil
- EPA TechDirect, hosted by U.S. EPA’s Technology Innovation and Field Services Division, [https://clu-in.org/techdirect](https://clu-in.org/techdirect)
- NRDC, Natural Resources Defense Council, This Week, http://www.nrdconline.org/site/MessageViewer?pw_id=4321&dlv_id=59761&em_id=64741.0

Related Professional Organizations & Metro Atlanta, GA Chapters

- AICHE, American Institute of Chemical Engineers. Contact Krupa Patel, krupa3@gmail.com, (404) 786 6117, http://www.aiche.org/Menu.html
- ASCE, American Society of Civil Engineers. Contact Rebecca Shelton, Rebecca.Shelton@gwinnettcounty.com (678) 376-7033, http://www.ascega.org/
- ASCE-EWRG, Environmental & Water Resources Group of ASCE. Contact Rahsheed Ahmad, rahmad@atlantaga.gov, 404-546-3313, http://www.ascega.org/environmental-water-resources/
- ASCE-GEOSTRUCTURE, Geological Institute Section of ASCE. Contact Sarah Fick, sfick@geosyntec.com, 423.385.2310, http://www.ascega.org/geominstitute-of-asce/
- ASSE, American Society of Safety Engineers. Contact David Brani, dbrani@atslab.com, (770) 423-1400, http://georgia.asse.org/
- AWMA, Air & Waste Management Association. Contact Thomas Wideman, (404) 506-7088, TCWidema@southernco.com
- GAWP, Georgia Association of Water Professionals. Numerous different professional committees. Contact Ashley Simone, asimone@gawp.org, (678) 540-7326, http://www.gawp.org/
- GCS, Green Chamber of the South, promoting green sustainable business practices, Atlanta , GA, https://greench.org/, contact Scott Sadler, 404-343-2026, scott@boardwalkcm.com
- GBA, Georgia Brownfields Association, http://georgiabrownfield.org/, Contact Kelly Andrews, kelly@hlstrategy.com
- GAWP-GGWA, Georgia Ground Water Association, Contact Greg Cherry, gccherry@usgs.gov, (678) 924-6632, http://www.gawp.org/group/gawa
- GTEC, Georgia Tank and Environmental Professionals Association, Info@gteca.com 770.426.1133, http://gteca.com/
- NGWA, National Groundwater Association, http://www.ngwa.org/Member-Center/Membership/Pages/ScientistEngineers.aspx, Erin Rodgers, erodgers@ngwa.org, (800) 551.7379
- SAME, Society of American Military Engineers. Contact Beth Harris, bharris@unitedconsulting.com, (770) 582-2829, http://sameatlantapost.org
Brownfield Site Remediation

Expedited and Guaranteed In-Situ Remediation of Brownfield Sites using High-Vacuum Extraction Combined with Formulated Surfactants, Biosolvents and Chemical Oxidants

EcoVac Services, a Georgia Corporation, has completed several Brownfield site remediation projects in Georgia and Oklahoma, and have more scheduled for 2016. EcoVac uses a combination of patented mobile technologies that lend themselves to remediation of Brownfield sites where cost and time frame to complete execution are drivers for the real estate transfer parties and state regulators. The patented technologies employed include High-Vacuum Multi-Phase Extraction/ Enhanced Fluid Recovery (EFR®), Surfactant enhanced NAPL and DNAPL remediation (SURFAC®), In-Situ Chemical Oxidation combined with EFR® (ISCO-EFR®), and Viscous NAPL/DNAPL remediation using a combination of biosolvents, surfactants and EFR® (SOLV-IT®).

EcoVac’s internal treatability lab, under the direction of Michiya Suzuki, P.E. (PEng), performs testing on site-derived media including NAPL, groundwater and soil to determine the optimal chemistries and concentrations to be used for each specific site.

**Atlanta, GA.** EcoVac has completed the remediation of a large TCE solvent plume under the Brownfield Program using a combination of EFR and ISCO-EFR® in 51 field days between October and December of 2015. Most of the implementation was performed inside of an existing building with TCE concentrations of up to 1,400,000 ppb in saturated and vadose zone soil extending from below the slab to 25 feet below grade.

**LaGrange, GA.** EcoVac has been approved by Georgia Environmental Protection Division to remediate a second large site under the Brownfield Program. The approach will use the SOLV-IT® process for remediation of Number 4 oil NAPL over six feet thick at depths of approximately 25 feet below surface grade. This site remediation is being funded by EPA grants and is scheduled for mid-2016 and will use EFR® as the delivery and recovery platform for the introduction and extraction of plant-derived biosolvents for viscosity reduction prior to injection of a site-specific formulated Type III mobilizing surfactant.

**Oklahoma City, OK, Site # 1.** EcoVac completed remediation of a small gasoline plume under the Brownfield Program implementing ISCO-EFR® over a two day period. The plume was 75 feet by 60 feet and groundwater was at a depth of 7 feet below ground surface. Six wells were treated. Post remediation monitoring showed benzene concentrations below MCLs and site closure was obtained to expedite an on-going construction project.

**Oklahoma City, OK, Site # 2.** EcoVac completed remediation of a large SPH plume (a mixture of diesel fuel, kerosene, naphthalene, gasoline, and crude oil) under the Brownfield Program implementing EFR® and SURFAC® over a thirty-one day period. The plume was 250 feet by 150 feet and groundwater was at a depth of approximately 16 feet below ground surface. Twenty-seven wells were treated. Post remediation monitoring showed no SPH in all wells except two, which were located in small oil field disposal pits. The pits were excavated and site closure was obtained to expedite an on-going construction project.
Remediate Groundwater Sites Impacted with:

- Fuels (gasoline, diesel, jet fuel)
- Solvents (chlorinated hydrocarbons: TCE, PCE, DCE)
- Highly viscous hydrocarbons (Creosote, Coal Tar, Pine Tar, No. 6 fuel oil)

EcoVac’s Innovative Solutions Include:

- Enhanced fluid recovery (EFR®), a mobile, vacuum-enhanced dual-phase/multi-phase extraction (DPE/MPE) for the removal of all VOC phases (i.e., separate, adsorbed, dissolved, and vapor phases) from the entire soil column utilizing a single remedial process. This process provides an expedited and mobile cost-effective-efficient solution for NAPL and dissolved phase plumes.
- Remediation of NAPL (LNAPL and DNAPL-TCE/PCE) utilizing our patented SURFAC® process, which combines the elements of specially formulated surfactant emplacement with EFR®.
- Remediation of dissolved phase VOCs utilizing our proprietary ISCO-EFR® process, which combines the elements of chemical oxidant emplacement with mobile EFR®.
- Remediation of viscous LNAPLs and DNAPLs, such as coal tar, creosote, crude oil, and no. 6 fuel oil (bunker fuel) with our patented process SOLV-IT® utilizing EcoVac Formulated Solvents (EFS®) combined with the SURFAC® and EFR® processes. Tar site remediation project summary available.

Background

EcoVac Services is a remediation services firm formed in 1995 with a multidisciplinary staff and affiliated offices positioned in numerous states providing services nationwide.

We pioneered, patented and provide expedited and cost-effective in-situ, mobile remedial solutions for groundwater sites impacted with fuels, solvents and other highly viscous VOCs. We have applied our cost-efficient technologies with regulatory acceptance in over 41 states and PR.

Our Differentiators & Benefits

- Field Proven (over 15,000 events, 2,300+ sites, 450+ clients)
- Effective (recovered over 2 million gallons of fuel & other VOCs)
- All NAPLs (DNAPLs like TCE and LNAPLs)
- Viscous NAPLs, too (creosote, coal tar)
- Rapid Remediation Closure (mos. vs. yrs., 2.5 acre plume in 33 days)
- Hydraulic Containment (prevents plume displacement)
- Highly competitive ($40/gal contaminant recovery for closure)
- Guaranteed Fixed Price Fuel Site Closures (avg $300K for 1/3-acre gas plume)
- Performance Based Remediation (PBR)/Pay for performance (PFP)
- Innovative (multiple patented technologies)
- Remedial Process Optimized (continuously by on-site operator)
- In-house treatability laboratory (R&D and site-specific optimization studies)
- Customized Treatment Train & Amendments (customized for each site)
- 100% Mobile (no fixed installation; $zero O&M)
- In-situ, 24-7 (beneath structures, too, minimally disruptive)
- All Lithologies (clays to fractured bedrock)
- Deep (effective to 150 feet below ground surface)
- Scalable (remediate unlimited size plumes)
- Green Sustainable Remediation (70% less GHG than fixed system)
- Nationwide Regulatory Accepted (operated in 41 states since 1995)
- Small Business, NAICS Code 592910, Remediation Services
- Perfect Safety Record